How to Thrive in the Era of Collaborative Services Entrepreneurship

In collaborative services entrepreneurship, firms cooperate, with each other and with customers, to forge win-win business models for digitally enabled service innovation.

Timothy Ogilvie

OVERVIEW: Services have been steadily displacing products in industrialized economies for a half century—which is not to say that products are going away; rather, they are going into services. Cheap sensors and ubiquitous connectivity are accelerating this trend. For technology-based firms, these conditions create many opportunities to participate in product-service business ecosystems. For industrial firms to thrive in this environment, they must be able to explore in the market with partners and customers. That is, they must learn to navigate partner uncertainty and end user uncertainty at the same time. This balancing act can be thought of as collaborative services entrepreneurship. The keys to success are establishing the firm's strategic boundaries and developing early business-model validation methods. This article illuminates those capabilities and shows how two (or more) firms can act in concert while each acts in its own self-interest.

KEYWORDS: Business model innovation, Services innovation, Product-services ecosystem, Platform strategy

The advent of cheap sensors and ubiquitous connectivity, combined with the trend towards consumerization of markets, has created abundant opportunities for the creation of new services. Products still matter, of course, but more and more often they are being consumed as part of a services offering. For instance, aircraft engines and building environmental controls are now provided as a service, with the service provider retaining ownership of the hardware and customers paying service fees as they go. Similarly, consumer offerings such as car sharing, home energy management, and age-in-place elder care solutions are all services that depend upon products—including sensors, software, and hardware—to enable their delivery.

Offerings this complex often require cooperation among multiple producers; very few firms have all the capabilities needed to support a complete product-services ecosystem. These conditions are giving rise to new experiments by small groups of firms operating as coalitions of the willing. Their aim is to co-create new services and business models through in-market experiments, often before final business terms have been set. In the past three years alone, my innovation consulting firm has worked with firms in consumer packaged goods, apparel, healthcare delivery, medical technology, insurance, education, and IT services, to build collaborations with other firms to develop ecosystem business models without long-term agreements in place. This is collaborative services entrepreneurship.

To act effectively in this environment, industrial firms must do two things:

1. Make sound strategic choices about what to own, what to share, and how to share it; and
2. Become adept at prototyping and validating business models off-platform, where new opportunities can be explored affordably without distracting the core business, making failures and pivots tolerable.

Step 1 is a hit-or-miss capability in many firms, depending upon the degree to which strategy development is well communicated and distributed throughout the organization. Without some degree of open communication and empowerment, most development teams will move timidly, and the organization will be left behind as a result.

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Design Thinking

Design thinking is a set of tools drawn from the design discipline that have been widely used to support broader business functions. A descendant of the discipline of human-centered design, design thinking is a powerful method for creating new solutions under conditions of great uncertainty where there is little existing data on which to build. Tim Brown, CEO of design firm IDEO, said, "Innovation is powered by a thorough understanding, through direct observation, of what people want and need in their lives and what they like or dislike about the way particular products are made, packaged, marketed, sold, and supported" (Brown 2008, p. 86). Design thinking is the process by which that deep understanding is acquired.

The direct observations occur through field ethnography, the study of users in their natural environment over a period of time, rather than through surveys or focus groups. Design thinking practitioners then use rapid prototyping, quickly developing concrete examples of the proposed product or service to share with potential users, who provide feedback on the relevance, usability, and value of the solution.

Often, these early prototypes take the form of low-fidelity media such as sketches and storyboards, so that they can be created quickly and cheaply and modified easily in response to user feedback. With each iteration cycle, the fidelity of prototypes increases, allowing developers and users to develop a sharper vision of the proposed solution as the feedback cycles progress. In this way, users participate directly in the design of solutions intended to support them.

The methods of design thinking and human-centered design have become widely distributed in the past decade. Specialized groups and dedicated design thinking labs have been created at diverse enterprises, ranging from McDonald's and Kaiser Permanente to the Veterans Administration and the US Office of Personnel Management.

Step 2 requires an incubator structure and skill at designing and executing affordable in-market experiments. It is a natural fit for firms using design thinking methods (see "Design Thinking," above), although it extends the traditional design activities beyond user experiences with products or services and into business models—in other words, how users access services and pay for them.

Firms with skill in design thinking and its antecedent, human-centered design, have an advantage for two reasons. First, design thinking is a collaborative problem-solving approach. It relies on direct observation of users to generate a mix of qualitative and quantitative data that yields insights and new hypotheses to be tested, in collaboration with likely users. In the design thinking process, "You need to engage your collaborators in [the sense-making] process to create a common 'mind' among them about the desired qualities of the designs you will create together" (Liedtka and Ogilvie 2011, p. 81). For collaborative service innovation, this means engaging directly both with customers and with prospective partners to co-create a solution that delivers value for all involved.

A second advantage for firms using design thinking is the way it manages uncertainty through action rather than analytics. As Liedtka and Ogilvie (2011) say, "Our hypotheses about the future can never be tested directly until we move into the marketplace. Without doing that, the only place you can look for evidence is the past. Yet under conditions of uncertainty, data from the past don't have much predictive power" (p. 127). Given the uncertainties involved in service innovation, this learn-by-doing approach is critical to establishing the value creation mechanism.

Although design thinking is the paradigm adopted by many service innovators, other approaches, such as lean startup, can also be successful, as long as they enable collaborative problem solving and emphasize in-market experimentation. This paper presents a case study of a firm that used design thinking and engaged with likely partners to create new value propositions based on technology-enabled services. FleetSure's development of the RoadAngel platform demonstrates how firms can cooperate, with each other and with customers, to forge win-win business models for digitally enabled service innovation.

Collaborating on the Architecture of the Revenues

Although the recent wave of services innovation is powered by new technologies—smaller, more powerful sensors and ubiquitous connectivity chief among them—the primary challenge of services entrepreneurship lies not in technology development but in the business model. The focus of product-service ecosystems isn't on radical new technologies but rather on new combinations of technologies and services that create value in new ways. Frequently, these new combinations require diverse sets of technical and operational capabilities—combinations not often found within the bounds of a single firm.

When two or more firms must collaborate to create these new combinations, there can be uncertainty about how each one gets paid. Figuring out how to distribute the value created in a collaboration is not a new issue; it is, in fact, a common problem in open innovation efforts. John Seely Brown, former Chief Scientist at Xerox, observed that, in crafting partnerships, "sometimes we must work particularly hard to find the architecture of the revenues. [Yet] this struggle is as valuable as inventing the technology itself," (Chesbrough 2005, p. 63). The shift from products to services further complicates matters, as it introduces new sources of value and new ways of generating revenues. David Newkirk, a former partner at Booz Allen and former head of Darden Executive Education, told me recently, "It looks like we're going to have to give away what we used to charge for, and charge for what we used to give away."

As a result of these forces, we are entering an era of enmeshed, ecosystem-based business models, in which businesses must cooperate up and down the value chain to create value. In this world, two (or more) firms can be more capable than one, as they act both in their mutual interest and each in its own self-interest. An insurance company's development of a fleet telematics system for its commercial clients illustrates how companies may navigate these new, tangled realities.

RoadAngel: Developing a Pay-as-You-Drive Insurance Service

In early 2014, Sara Flanagan faced an opportunity and a dilemma. As general manager of a large property and casualty insurer, which we'll call FleetSure, she had begun to explore a pay-as-you-drive insurance offering for truck fleets. The concept, code-named RoadAngel, combined an insurance plan with real-time driving sensors that tracked truck use and driver behavior. In addition to basing insurance rates on actual usage and behavior, it would provide personalized behavioral nudges to encourage safe driving practices among fleet drivers—thus reducing both operating costs for the truck owner and claims for the insurance provider.

Sara's end game wasn't merely buying risk. Her hunch was that RoadAngel could change driver behavior in a way that reduced operating costs as well as accident claims, and generate value well beyond the reduced claims that could be expected from safer driving. It might create incentives for teams to operate more efficiently, for example, or reduce costs in other categories such as fuel consumption. The resulting benefits could be shared between FleetSure and the customer. The development of this gain-sharing business model supported by data analytics represented an important new strategic investment for FleetSure.

As one of the nation's top insurers of small- and medium-sized fleets, FleetSure possessed a strong network of independent sales agents, world-class underwriting capability, and best-in-class claims processing. As Sara considered the new offering, however, she knew the company would need to access third-party capabilities to support the new business model. FleetSure did not have any in-house sensor technology assets; nor did it have any skill at developing customized interventions to modify driving behavior. In fact, Sara and her colleagues didn't know much about behavior change at all.

This was Sara's dilemma: she knew she needed partners, but FleetSure did not have a history of innovating with partners. With so much uncertainty about the value proposition for RoadAngel, how could she add the uncertainty of new partners who would make their own demands on the business model? Would there be enough profit to satisfy FleetSure, a behavior change firm, and a sensor technology firm? And if it worked, how would FleetSure protect its role in the ecosystem and its fair share of the profits?

Making Choices About What to Own and What to Share

Sara found herself at Step 1 of the collaborative services entrepreneurship process. This is a planning activity, rooted in the firm's strategy, that sets boundaries for engaging third parties. Those boundaries are defined by the overall strategic goal and by the firm's values. At FleetSure, the focus on gain-sharing business models based on analytics was a key output of the strategic plan for the Property & Casualty division, a plan Sara had helped create. The translation of analytics into a behavior-change platform was an exciting amplification of that strategy.
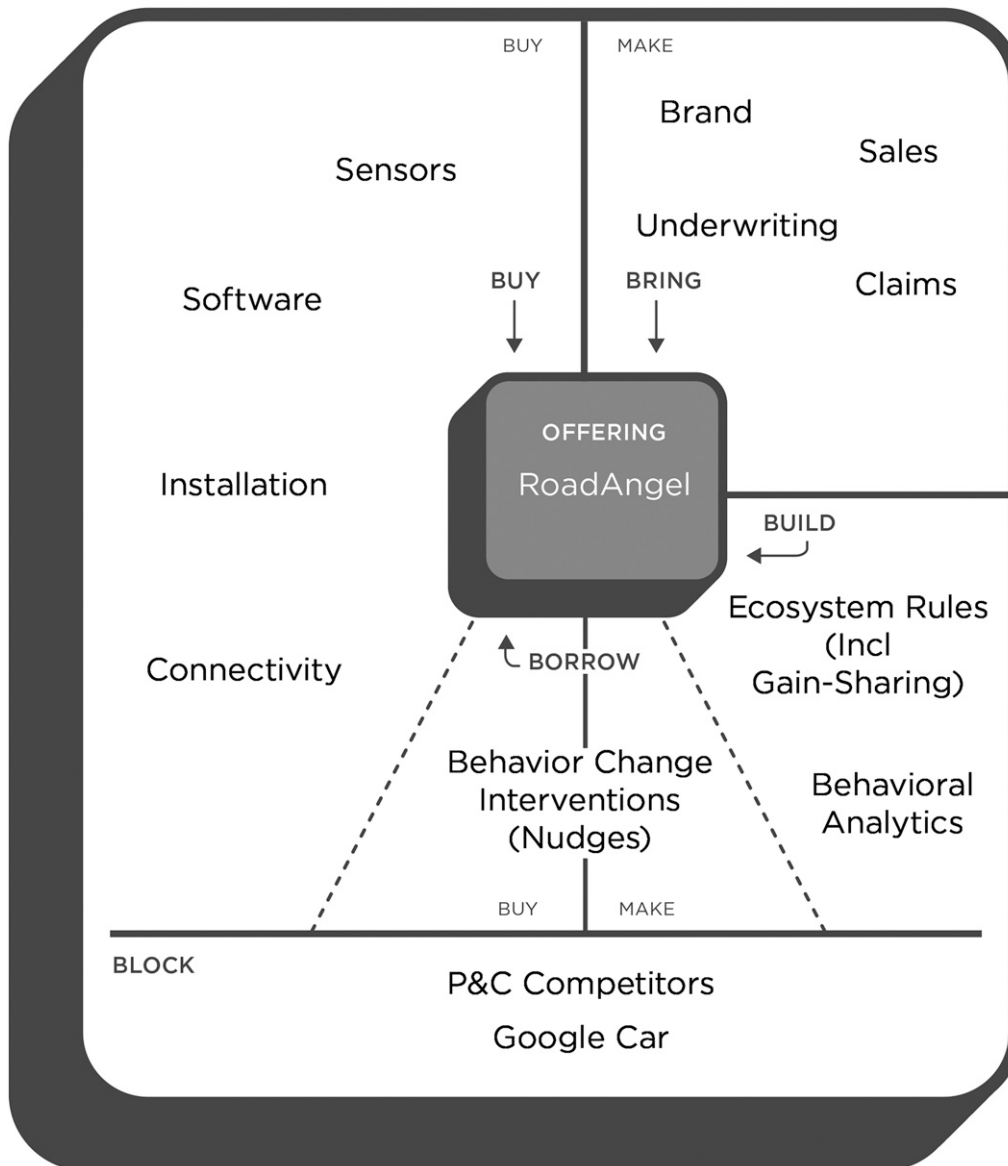
With this strategic imperative in mind, Sara's team set out to map the ecosystem capabilities that would be required to create an offering such as RoadAngel. The team created the map using a simple one-page template provided by an external consultant. The "5Bs template" helped the team envision the capabilities required to support RoadAngel and categorize them according to five Bs:

- BRING—Assets and capabilities the business has today
- BUILD—New capabilities the business will create itself
- BORROW—Capabilities the business will access through third parties, at least until more is known about the new service
- BUY—Capabilities the business will buy or access through third-party partners
- BLOCK—Entities the business will exclude for the foreseeable future

The Bring and Build elements are those the company believes it must control internally to protect its position in the ecosystem. The Buy and Block elements identify potential vendors and suppliers and highlight where appropriate confidentiality measures are needed. The Borrow category is a zone of uncertainty. Elements that start in Borrow typically move into either Build or Buy over time. Borrow is a good option when a firm needs to accelerate the initial development process and reduce risk before it can develop core capabilities. It's best to only borrow one or two elements. Although it is just one example of how a firm might frame its strategic choices, the 5Bs template provides a simple way for a small team to explore the merits of different configurations.

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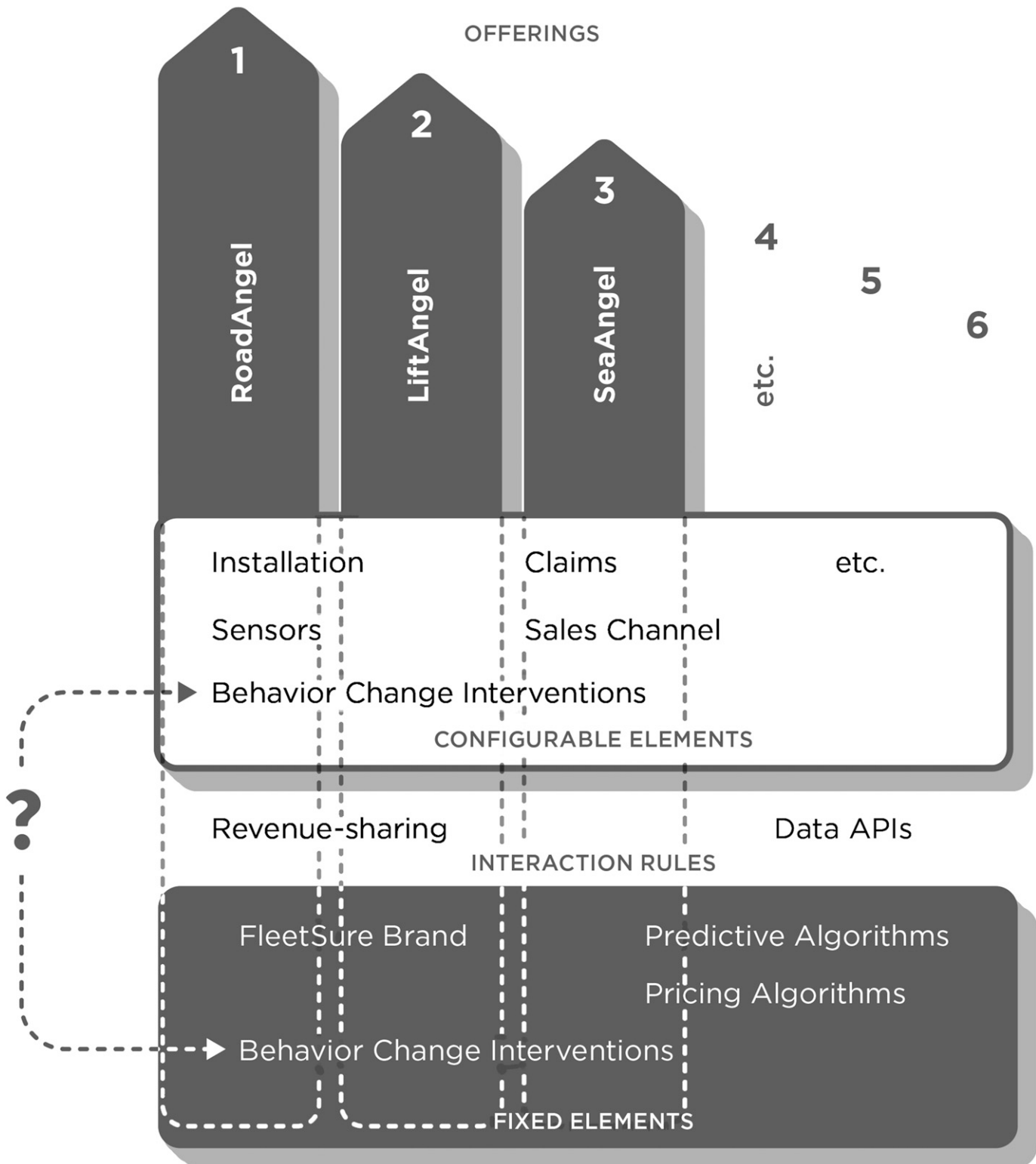## 5Bs Template

FIGURE 1. The 5Bs template for RoadAngel

Now that FleetSure had set boundaries on what to own and what to share, the team turned its attention to the question of *how* to share. Because of the strategic potential of RoadAngel, the team defined it as a platform. A platform can be thought of as a meta-offering, controlled by a single convening firm, that provides the foundation for many different offerings from multiple partner firms. FleetSure saw the potential for RoadAngel to become part of a larger platform that included a range of solutions to protect firms and their front-line workers in diverse industries. The overarching platform, which the team called Guardian Angel, could be expanded, the company believed, to include offerings such as a solution for heavy equipment operators (LiftAngel), a maritime version (SeaAngel), and specialized versions for other industries.

Platforms are attractive because a single infrastructure and brand investment can generate revenue through multiple offerings. A platform has four essential types of elements (Figure 2):

- *Fixed elements* are the pieces of the platform that the convening firm believes it must control in every circumstance, for one or both of these reasons:
  - They represent an underlying transformation process that creates value for the firm and will allow the platform to scale.
  - They represent a crucial control point that makes the platform defensible from competitive encroachment.
- *Configurable elements* allow third parties to (a) invest in the platform, (b) create unique offerings, and (c) participate in the revenue.
- *Interaction rules* mediate between fixed and configurable elements to enable many different offerings.
- *Offerings* are the different manifestations of the platform offered to the market.

At FleetSure, the 5Bs template gave clarity to the engineering team about what to protect and what to share (Figure 1). A decade ago, these choices would have been made by Strategy and Business Development, then handed over to Engineering/Product Development. Today, as the trend toward technology-enabled services has created a collision between complex technical architectures and complex business architectures, technology managers cannot afford to be left out of these crucial framing choices. The two domains must be framed and bounded simultaneously, in broadly inclusive strategic dialogues undertaken with the goal to strike a balance between what's technically possible, what's economically feasible, and what's strategically desirable.

Platform Architecture

FIGURE 2. Guardian Angel platform architecture

The fixed elements of the platform are where FleetSure believed that, as the platform convener, it could assert itself to create value and defend its investment in the platform. The configurable elements include those aspects that FleetSure realized it needed from third parties. The interaction rules, which govern the interaction between the fixed and configurable elements, are both the honey that attracts strong partners and the glue that keeps the platform

elements in place. In software, interaction rules are captured in application-program interfaces (APIs), which govern how third-party software—an app—interacts with original equipment hardware—a device—or the operating system driving the hardware. In platform construction, interaction rules govern not only technical interactions but operational and organizational interactions, dictating how firms will work together in the context of the platform and under what terms.

To understand the importance of configurable elements and interaction rules to a strong platform, consider the crucial role of sensors in the Guardian Angel platform. The firm that provides sensors for the RoadAngel offering would most likely be a provider of in-cab telematics for trucks. For the LiftAngel offering, however, FleetSure would need a different partner, one that provides sensors for lift equipment such as forklifts. Both providers would adhere to a single set of interaction rules that govern revenue sharing, data sharing, and so forth. Thus, the interaction rules allow FleetSure to attract other partners to the platform without having to negotiate unique agreements with each new collaborator.

This platform architecture also reflects FleetSure's uncertainty about where to put the behavior-change interventions. For RoadAngel, this capability would be provided by a third party. But FleetSure planned to borrow the behavior-change intervention capability. Over time, the team reasoned, it might be advantageous to build the behavior-change elements in house as a way to retain differentiation and ensure competitive advantage.

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In other words, to protect its platform from competitive encroachment, FleetSure might have to become more than an insurance provider, developing an entirely new capability.

For Sara Flanagan and her team, the platform choices mapped on the 5Bs template reflected their beliefs about what would make the RoadAngel offering both compelling and defensible. To make it compelling, FleetSure would combine its underwriting strengths with a new source of data— real-time data from driver behavior. To ensure competitive defensibility, the team focused on creating control points— key elements of a platform or offering that are difficult for other firms to replicate. To determine the control points for RoadAngel, Sara's team assessed a range of platform components for defensibility, rating each on a scale of 1 to 10, and plotted them on a control point grid, a tool provided by the consulting partner (Figure 3). The continuum ranged from ubiquitous (1), elements available to nearly everyone, to constrained (10), elements available to very few market
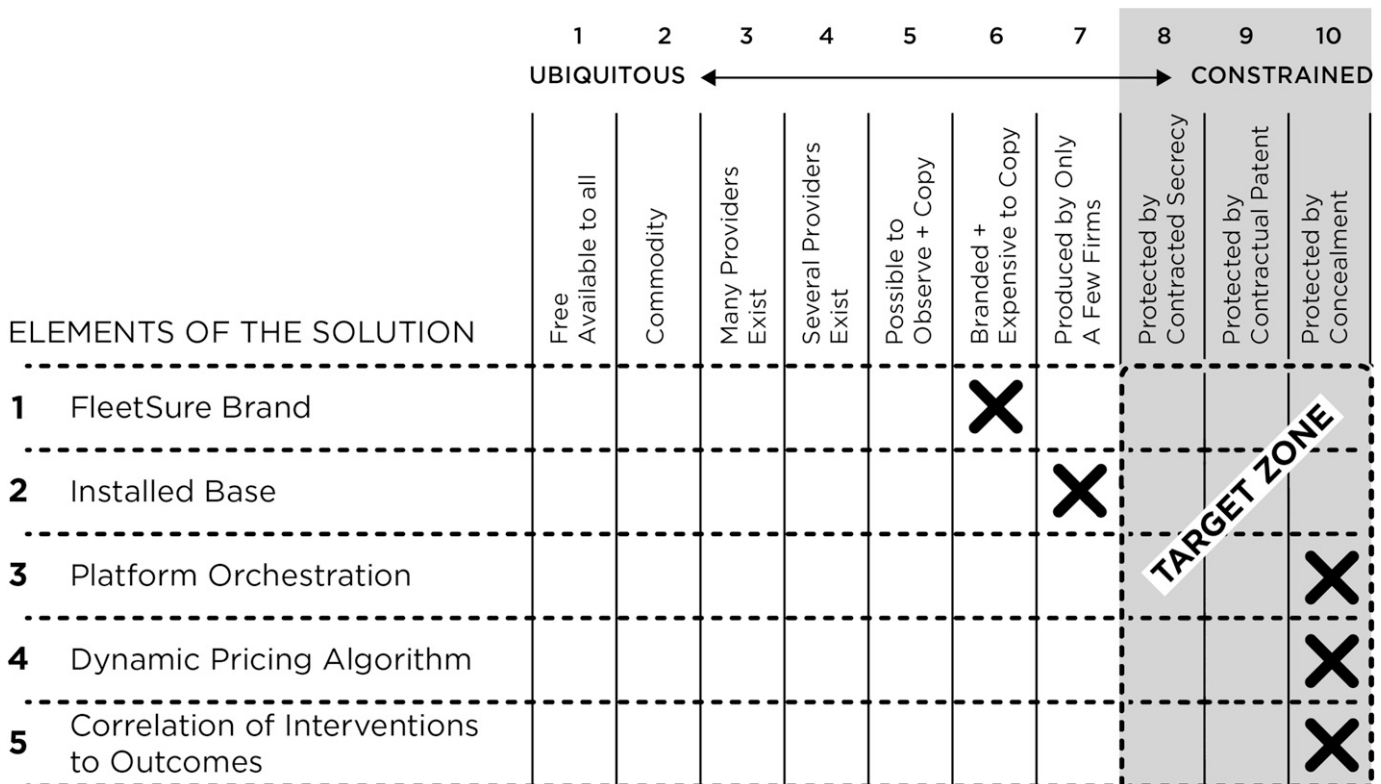
ELEMENTS OF THE SOLUTION	1 Free / Available to all	2 Commodity	3 Many Providers Exist	4 Several Providers Exist	5 Possible to Observe + Copy	6 Branded + Expensive to Copy	7 Produced by Only A Few Firms	8 Protected by Contracted Secrecy	9 Protected by Contractual Patent	10 Protected by Concealment
1 FleetSure Brand						✕				
2 Installed Base							✕			
3 Platform Orchestration										✕
4 Dynamic Pricing Algorithm										✕
5 Correlation of Interventions to Outcomes										✕

UBIQUITOUS ◄————————► CONSTRAINED

TARGET ZONE

FIGURE 3. FleetSure's control point grid

participants. The most constrained components, those rated 8–10, represent the strongest strategic control points.

When designing a services platform strategy, it is important to plan for both near-term and longer-term control points. In the short term, the RoadAngel offering had two moderately strong control points that could be asserted at the outset: (1) the FleetSure brand and (2) the company's installed based of fleet insurance customers. The team felt the brand would lend credibility to the offering, as well as a pool of potential adopters; a significant percentage of existing customers, the team believed, would convert to the gain-sharing model. These customers would ensure rapid scale-up for RoadAngel. The team also believed that, as the platform creator, FleetSure could (3) orchestrate participation in the Guardian Angel platform to divide tasks so that no single collaborator could wield too much influence or gather too much knowledge. The team ranked this control point as a 10.

The longer-term control points are where the potential for the RoadAngel offering became exciting. Once the solution began to accumulate usage data, FleetSure would be able to assert two new control points, both based on data analytics: (4) proprietary pricing algorithms based on the data gathered by the RoadAngel sensors and (5) correlations between behavioral interventions and actual outcomes. These correlations could provide the basis for driver-specific interventions that would give FleetSure a direct way to influence outcomes, and not merely pool risk. In effect, it could open the door for FleetSure to become a true value-added service provider in ways that were not possible in its current business.

Validating the Business Model

With the platform defined, the control points identified, and appropriate IP strategies in place, the RoadAngel development team was ready to stress test its new concept in the market. Sara Flanagan felt she had taken the right steps to address her original dilemma—how to explore this potential breakthrough offering without compromising the company's ability to make money if it worked. As one team member told the consulting team, "We're building a new muscle, the ability to measure twice on the business model before we cut once."

Under Sara's leadership, FleetSure had already developed a strong capability for design thinking and affordable in-market experiments, housed in its experimentation unit, the FleetSure Accelerator. The Accelerator was set up as a petri dish to explore new concepts quickly and affordably. It used design methods, including rapid prototyping, visualization, and early customer validation. Most importantly, the FleetSure Accelerator team was an off-platform capability. That is, it did not draw resources from the core business and was therefore in a position to iterate rapidly and experiment with new models without disrupting day-to-day operations. Now the company would use those capabilities to validate its fledgling business model.

The RoadAngel development team began its validation activities with existing fleet customers. First the team developed a low-fidelity visual prototype, a poster giving just enough information to allow customers to understand how it might work (Figure 4). Team members then took the prototype to several customers to see how they responded to the concept. The key to these early meetings was to listen, not to sell. For that reason, the prototype diagram was more gestural than explicit, showing the key activities of the solution but leaving ample room for partners and customers to fill in the details. That approach was perfect for this initial development phase, since the team wasn't yet sure of the details itself.

These early meetings confirmed the appeal of the RoadAngel offering. It also led Sara's team to make several refinements of the concept. The idea of providing incentives to drivers was met with skepticism, for example. The need to minimize look-away time for drivers became apparent, too. The discussions also yielded a list of potential cost savings, insights that play a key role in developing the business model for RoadAngel. In this way, the visual prototype allowed the team to fine-tune its approach without making any development investment beyond planning and visualization, and without involving any third parties.
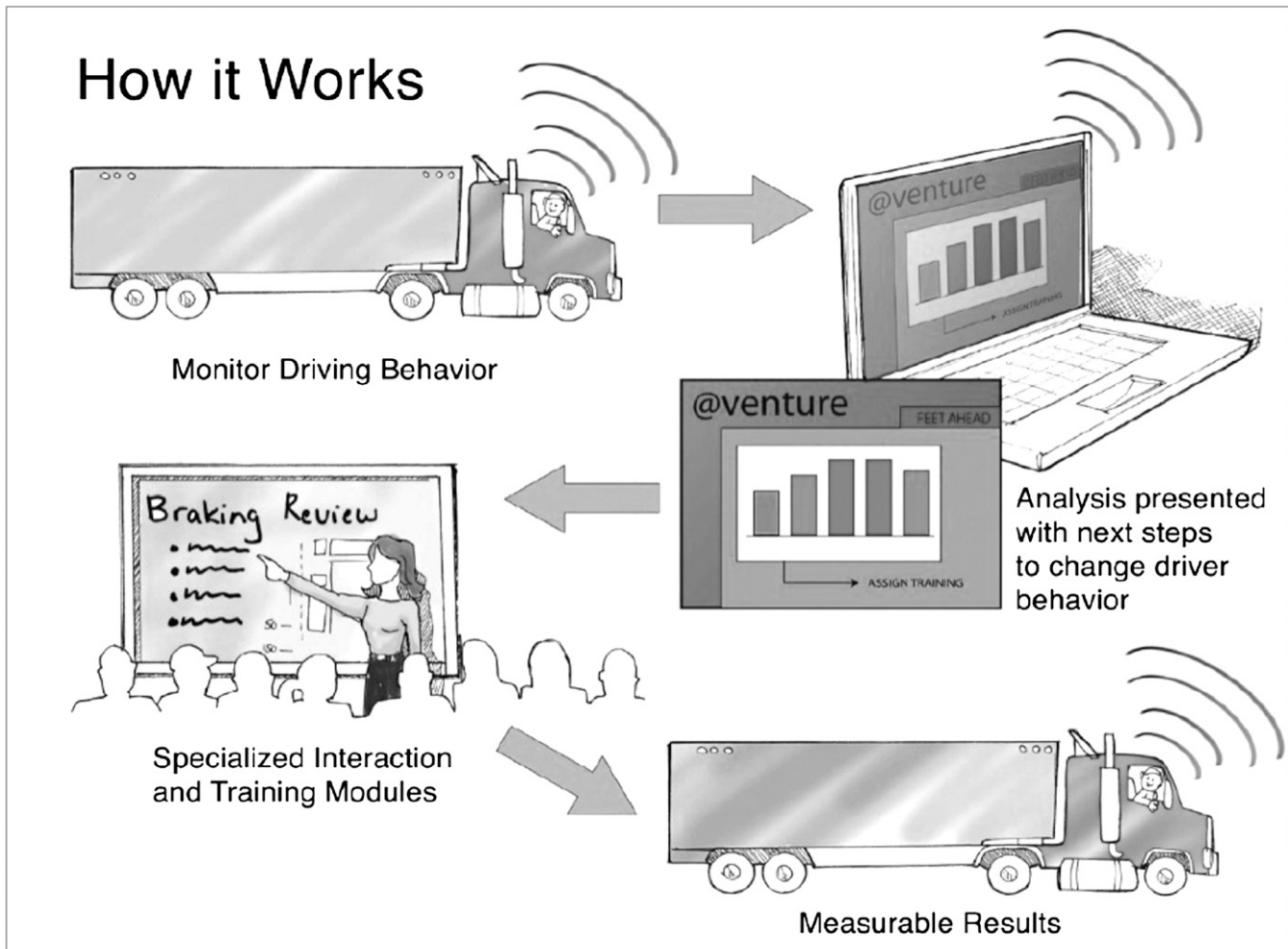
Identifying Partners

Now that the RoadAngel value proposition was clarified, the next step was to find partner firms to provide in-cab sensors and customized behavioral nudges. (These were Buy and Borrow choices, respectively, in the 5Bs template.) Two strategic decisions complicated the search.

First, the telematics firms that were interested wanted to handle *both* the sensors and the driver interventions. FleetSure's strategy was to divide these capabilities among specialist providers. This decision was made partially to provide protection for a key platform control point. Sara's team also believed that sensor-and-software firms were not likely to be good at devising customized behavior-change solutions. Behavior change expertise was viewed as a systemic weakness of telematics offerings that RoadAngel would have to correct in order to succeed.

A second sticking point was data sharing. Telematics firms were insistent that FleetSure would receive the same post-trip reports as the fleet clients, not the raw data. This was a nonstarter for Sara Flanagan's team. Combining raw data with the behavioral interventions was the real end game for FleetSure. The longer-term strategic control points depended on it.

These requirements created significant complications in developing an agreement with potential telematics partners. The first-choice firm, Shiny Side Up, was unwilling to provide hardware and software without being privy to the behavioral interventions. The Shiny Side Up CEO said, "Our whole value is in linking the two. Otherwise, you might as well just put a camera in the cab." The FleetSure team, certain that it wanted separate partners for the telematics and behavior change roles, shifted its attention to an alternative provider, although that firm's solution wasn't nearly as scalable as Shiny Side Up's.

Several weeks went by as FleetSure negotiated with both Shiny Side Up and the second-choice provider. FleetSure signaled to each firm that this was a competition with its key

How it Works

Monitor Driving Behavior

@venture

Analysis presented with next steps to change driver behavior

Braking Review

Specialized Interaction and Training Modules

Measurable Results

FIGURE 4. Low-fidelity visualization of RoadAngel

competitor, which kept both companies engaged. Eventually, FleetSure offered to share the behavior modification interventions openly during the 100-day proof-of-concept phase. In exchange, FleetSure would require real-time access to the raw data flows—not just compiled reports. For a week, it looked like an impasse.

Finally, the Shiny Side Up board chairman intervened, impressing upon the company's CEO that FleetSure was offering a unique partnership opportunity. The telematics firm agreed to sign on in exchange for above-market revenue-share minimums. Again, FleetSure entered into a 100-day agreement with an out clause for both parties.

Because of FleetSure's decision to separate telematics from behavior change, the candidate list for the behavior-change role excluded the telematics firms. This choice added time to the development effort, since FleetSure had to engage in a separate, extensive search process. The RoadAngel partnership team searched broadly for potential partners, looking at performance coaching firms, cognitive behavioral therapy groups, university spin-outs based in neuroscience, and adult learning companies.

The adult learning field ultimately provided several candidates that met FleetSure's criteria. One small firm, Learn-2-Earn, rose to the top. That company's niche was teaching technical skills using a virtual learning platform. A key selling point was its task-specific video modules, which it claimed activated mirror neurons to get technical staff to adopt new behaviors. The FleetSure project team was intrigued; the Learn-2-Earn solution might provide the behavioral nudges that RoadAngel needed.

The Learn-2-Earn leadership team embraced the Road-Angel opportunity as a logical extension of its capabilities into an attractive market. More important, FleetSure represented a potential distribution channel that could scale beyond the firm's modest capacity. FleetSure promised to make the company whole for its costs plus typical margins, with flexibility to figure out a win-win model once they understood the offering better. The two companies signed a simple, six-page, 100-day collaboration agreement to co-develop a proof of concept.

With key partners in place, FleetSure was now ready to develop a revenue model for RoadAngel.

Validating the Revenue Model

When FleetSure initially reached out to the telematics firms, the business model prototype was simple: the visual prototype of the intended offering along with a set of proposed partnership terms. Together, these two documents comprised

a business model prototype good enough to enable validation with the two key partners the platform would require. These partnerships represented RoadAngel's supply chain. Now the team needed to validate the demand chain, especially the revenue model.

For FleetSure, the gain-sharing revenue model represented a significant risk. Its existing business model was to buy risk at a fixed price and minimize it through pooling. In a gain-sharing model, FleetSure would be paid a lower baseline premium, then make most of its profit on cost reductions, which it would share with the fleet operator. If there were no cost reductions, there might be no profit.

To manage this risk, the team had to validate two key assumptions. First, it had to prove RoadAngel would result in significant savings in operating costs for fleets. Second, it had to be sure the company could keep at least 66 cents and share with the customer 34 cents of every dollar of savings. Otherwise, the offering wouldn't be worth the investment. "Sixty-six cents on the dollar," became the rallying cry for the development team.

Pricing was a key challenge for the model. How would the company know how to price the service, to ensure customers would see enough value to participate and it would harvest enough value to make the service worth offering? The typical approach to this question would rely on spreadsheet analytics that predicted demand at different price points. Over a series of prior innovation projects, however, the Fleet-SureAccelerator team had developed a healthy distrust of its internal modeling, and a bias toward in-market validation. For RoadAngel, the team took a different approach, one emerging from its design thinking orientation.

To explore the pricing question, the team decided to take a visualization and co-creation approach based on design thinking methods. First, the team created a poster on which each of the potential savings categories identified in the initial user research was represented (Figure 5). The company then asked several customers to participate in a live co-creation session to sort and rate the savings opportunities. In the session, participants were asked to indicate their assessment of the relative size of each savings opportunity using sticky notes. To keep the exercise simple, FleetSure used a restaurant-price metaphor, asking participants to rate the various elements on a scale from $ (low savings potential) to $$$ (high savings potential).

The invited customers embraced the invitation as a chance to be on the inside track for a new solution and responded enthusiastically. One operations manager went above and beyond FleetSure's request; he got out his budget from the
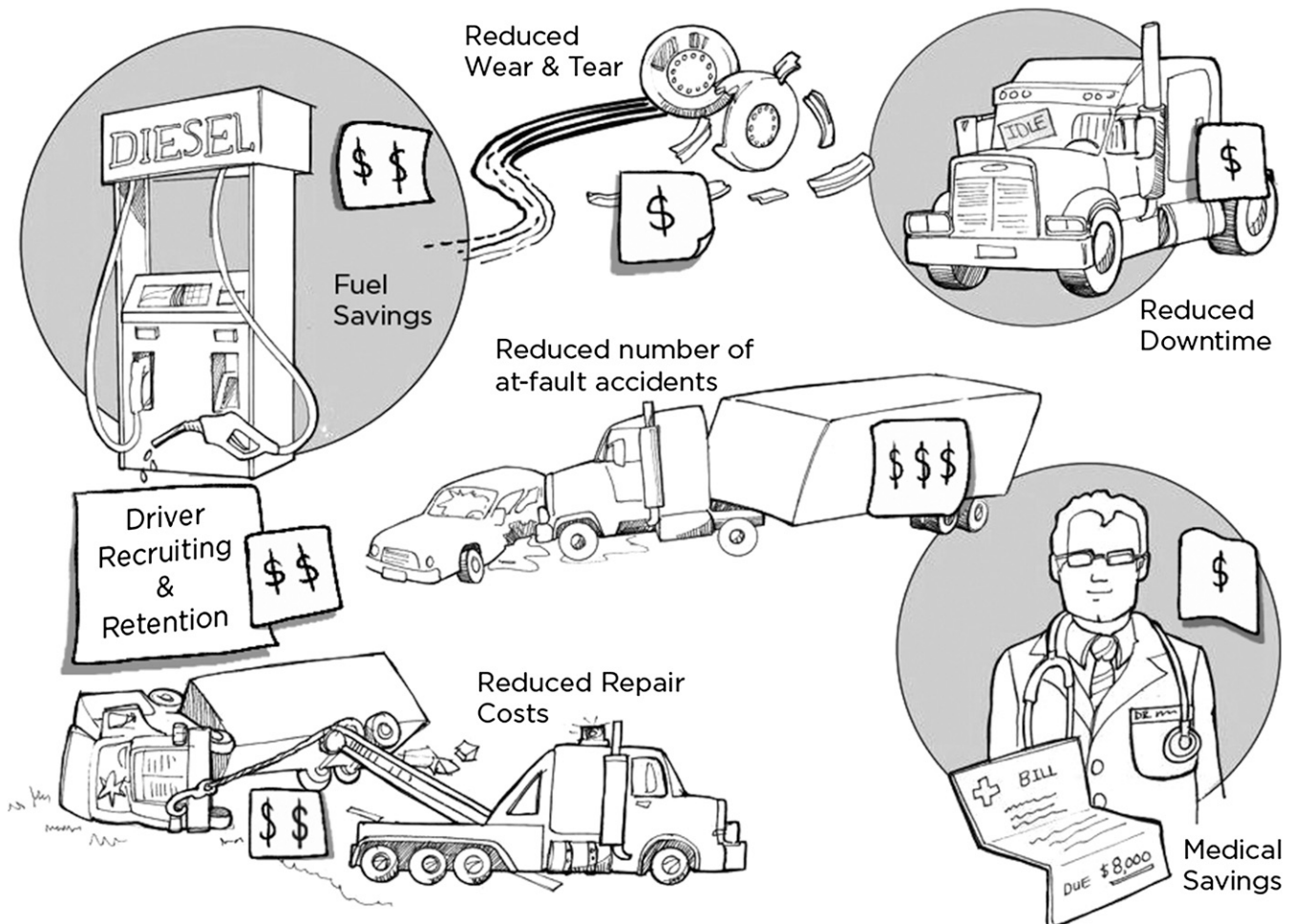

FIGURE 5. Revenue model co-creation poster for RoadAngel

Collaborative Services Entrepreneurship

previous year and provided the RoadAngel team with actual expense figures for the categories on the poster. Participants also identified alternate categories, including driver recruiting and retention. The customer who offered this addition said, "That's a significant operating cost, and this system would attract and retain better drivers, the ones that really want to improve and win together."

This validation activity led the FleetSure team to a happy discovery: the RoadAngel solution created so much value in areas beyond insurance that FleetSure could keep the lion's share of the cost savings, more than the 66-cent threshold—and still deliver significant value for customers. This was a significant coup, for the platform and for the development team—as the team lead said, "If we had explored the pricing in the traditional way, we would have left way too much money on the table."

The RoadAngel Outcome

Sara Flanagan's journey started with an amazing but risky strategic opportunity and a dilemma about how to partner in the face of great uncertainty. This dilemma had the potential to result in endless debate in the conference room, rather than action in the market. Instead, the RoadAngel case shows how the firm was able to think big, act small, and move fast. For Sara's team, think big started with envisioning the RoadAngel platform in the first place. It continued as the team worked through the planning templates, developed the platform architecture, and identified the control points.

With those boundaries set, FleetSure was able to act small by creating low-fidelity visualizations to validate the concept with customers quickly and at minimal expense. Then, it was able to move fast by making short-term commitments to potential partner firms who were willing to participate in the development of the platform. Another key to speed was the FleetSure Accelerator group and the off-platform experimentation capability it offered.

There were several bumps in the road, naturally. The initial hypotheses about influencing fleet culture through driver incentives were overreaching, a fact quickly established by initial customer discussions. More importantly, the debate with Shiny Side Up about data rights was time-consuming and unnecessary. As FleetSure's management came to realize, shared data rights are the only tenable solution for device-enabled services, since these services live and breathe in the commingling of data that allows each partner to optimize its contribution. Afterwards, the FleetSure leadership team wondered aloud why they were so willing to share revenues but not data, since both are essential to a healthy product-services ecosystem.

> **Shared data rights are the only tenable solution for device-enabled services, since the commingling of data allows each partner to optimize its contribution.**

Conclusion

Despite the challenges, the development process led by Sara Flanagan's team resulted in a new offering for FleetSure that created near-term revenues while paving the way for a long-term strategic platform. The RoadAngel journey is a clear example of collaborative services entrepreneurship in action.

All firms may face strategic opportunities that require third parties to fulfill; frequently, these are opportunities based in services. When these opportunities arise, industrial firms cannot afford to treat them as special circumstances. Rather than triggering a series of memos and questions and meetings, these opportunities need to be met with planning tools for defining the opportunity and validating the concept and defined boundaries for negotiating partnerships. Taken together, these elements must provide guidance for deciding what to own and what and how to share with potential partners, and for validating business model concepts at a very early stage. The process must include input from across the organization, including business development, technology management, engineering, marketing, and executive leadership.

This meeting of the minds is urgent, because there are countless opportunities similar to RoadAngel. They are on the drawing board at nearly every company—tantalizing possibilities that require diverse capabilities drawn from multiple firms to deliver their full value. Too many firms hang back out of caution, while others move confidently to shape the future. The era of collaborative services entrepreneurship is here, and it's blossoming in exciting combinations. Industrial firms must have these new elements in place to ensure their leadership role.

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